# I. The Role and Principles of Money, the Structure of the Federal Reserve, and Monetary Policy

'Short', 'Medium', and 'Long' represent the type of essay answers I expect you to give to each of these questions.

- 1. What is Money? Give a broad definition of money stressing its stratified (hierarchical) structure and explaining why definitive money sits at the top of the pyramid? *Medium*
- 2. Relate this view of money to the definition of different monetary aggregates. Explain the differences between M1, M2 and M3. Why does the Fed keep track of these as well as the Domestic Non-financial Debt, i.e. DNFD (include a definition/explanation of what is DNFD). What do we call 'near monies'? *Medium*
- 3. What are the four functions of money? *Short*
- 4. What is the Federal Reserve? Why was it created? How is the Federal Reserve System Constituted? Explain its organizational structure. *Medium*
- 5. What are the functions of the Federal Reserve? What are the main tools of monetary policy and which tool is under the direct control of the Fed? Which is its primary objective? Does the Fed act defensively or proactively in conducting monetary policy? Explain. *Medium*
- 6. What are the overnight rate and the discount rates? How does the Fed control each? Explain carefully, stressing why the effective overnight rate always fluctuates, even if marginally, around the targeted overnight rate. *Medium*
- 7. What are reserves, required reserves and excess reserves? What happens when banks in the aggregate find themselves short of reserves? What happens if the banking system is flooded with reserves? What is the impact on the rate of interest? How does the Federal Reserve respond to such scenarios? Give examples of how high powered money is injected into the system and the corresponding effect on reserves and Fed's reaction. *Long (hint: Notes#2)*

#### II. Financial Markets, Instruments, Market Makers

- 8. How do we classify financial markets (give 4 types of classifications, explaining the types of financial markets under each classification). *Medium*
- 9. Give at least 3 types of Money Market Instruments. Explain each. Short

- 10. Give at least 3 examples of Capital Market Instruments. Explain each. Short
- 11. Who are the Market Makers and what is their role? Give examples. Short
- 12. What is the difference between spot and forward (or futures) markets? *Short*
- 13. What are derivatives? Explain the difference between a 'call' and a 'put'. Short
- 14. What is the distinction between a corporate stock and a corporate bond? Would you rather own preferred stock or common stock? Why? *Short*
- 15. Rank these in terms of safety and liquidity, putting the safest instrument first: T-bill, Mortgage, Commercial Paper, Government 20-year bond, Government agency security, Commercial paper. Why this order? *Short*
- 16. What is the difference between compounding and discounting? Give a simple example of each. *Short*

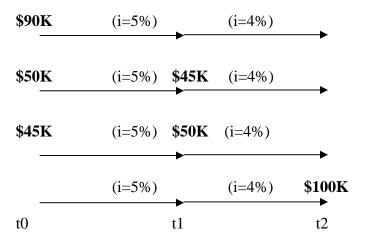
## 17. Problem #1:

Rank the following 4 options, from the most to the least lucrative. Show all of the steps in your calculations and explain.

- A. Get \$90,000 today, or
- B. Get \$50,000 today and \$45,000 a year from now, or
- C. Get \$45,000 today and \$50,000 a year from now, or
- D. Get \$100,000 two years from now.

Rank these from the best option to the worst, given that the interest rate which prevails in the first year is 5% and the interest rate which prevails in the second year is 4%. AGAIN, you have to show all steps and all calculations that lead to your ranking order.

#### HINT:



#### 18. Problem #2

You are given two investment strategies: A and B. Calculate the initial investment required for each.

- **A.** How much do you need to invest today, in order to get \$50 in two years' time, if you expect the annual interest rate to be 15% in both years?
- **B.** How much do you need to invest a year from now, in order to get \$50 in two years' time, if you expect the annual interest rate to be 15% in both years?

Which option would you prefer? Are you indifferent between these two investment strategies? Why?

## III. Interest Rate Determination, Term Structure of Interest Rates and Market Efficiency

- 19. There are two main theories of interest rate determination. What are they? Explain each, carefully outlining their divergent understanding of the nature and role of interest rates. *Long*
- 20. What is the Yield Curve and what does it represent? Short-Medium
- 21. What is the expectations theory and how do changes in expectations affect the shape and slope of the yield curve? *Medium*
- 22. What are several key problems with expectations theory and how do we need to modify it to make it more realistic? *Short*
- 23. There are two types of formation of price expectations. What are they? Explain the differences between the two. *Short*
- 24. What is the Efficient Market Hypothesis? What are its weak and strong versions? *Short*

#### IV. Exchange Rates

- 25. What is the Balance of Payments and what does it track. What is the difference between the Current Account and the Capital Account? Why is the sum of current account and capital account equal to zero (if we abstract from official statements balance)? Can you give an example? *Medium*
- 26. Explain Purchasing Power Parity? What are some of the many unrealistic assumptions that underpin this concept? *Medium*

- 27. What is the Interest Rate Parity Theory? Discuss the theory in terms of nominal and real rates of return on assets. *Medium*
- 28. What triggers changes in the exchange rate? What factors cause a shift in the supply and demand for currency (say dollars)? *Medium*
- 29. How do changes in the exchange rate affect the size of the current account? Give Examples. *Medium*

## V. Financial Institutions, Evolution of Capitalism and Financial Instability

- 30. What are financial intermediaries and what purpose do they serve? There are generally 4 different types of financial intermediaries. What are they and give an example or two from each type. *Medium*
- 31. There are 4 types of risk which Financial Intermediaries face. Carefully explain what they are and give examples of each. *Medium*
- 32. After the Great Depression there were several key regulatory changes made to the banking structure. What were they? Give the specific names of those regulatory remedies. Why were they necessary? Link your answer to the types of problems that were experienced during the Great Depression. *Medium*
- 33. How has the structure of commercial banking changed since 1927? What have been the major acts of deregulation? Give examples. The most recent era of deregulation gave rise to Bank Holding and Financial Holding companies. What are these? *Medium*
- 34. Hyman Minsky advanced a theory of financial instability. What are the main ingredients of his theory? Explain in detail the evolution of finance through its 3 stages and the role and functions of the Spender of Last Resort and Lender of Last Resort. *Long*
- 35. Hyman Minsky also classified capitalism is several stages. What are these and how did the financial structure evolve during those stages? What was the type of activity financed and which were the main sources of finance in each of these periods? Provide specific examples of financial problems during these stages (e.g. Savings and Loans Crisis during Managerial Capitalism). *Long*